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TITLE

EMBEDDED OR CEILING-FITTED ILLUMINATION DEVICE WITH BACK
REPRODUCING DECORATIVE IMAGES

DESCRIPTION

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Scope of the Invention

The present invention generally concerns the field of interior illumination and more specifically refers to an embedded or ceiling-fitted illumination device on whose back decorative images are reproduced.

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Description of the Background Art

The illumination of confined interiors, especially offices, work areas, exposition areas, transit or waiting rooms, may be achieved, among other methods, by devices embedded in the ceiling or walls or fitted on the ceiling.

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Aside from possible aesthetic value obtained from the shape of the single devices, this type of illumination may result anonymous and even oppressive, especially in the presence of low ceilings or in rooms of small size.

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For room personalisation, and also for the presentation of advertising messages in public transit rooms, light panels reproducing decorative images and various message types are frequently used. Solutions of this type, whose primary function is not the illumination of the room, but rather the decoration or the transmission of messages, foresee an opalescent panel on which an image is reproduced and a light source lying behind whose light spreads in a nearly uniform manner through the panel.

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Solutions of this type are essentially adapted for wall installation, and the images produced lack depth, which render them unsuitable for installation in those rooms characterised by modest dimensions.

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Object and Summary of the Invention

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The object of the present invention is to provide an illumination device that creates the illusion of natural illumination coming from an external source, suggested through a decorative image, preferably (even if not exclusively) of naturalistic subject.

This object is achieved with the illumination device according to the present invention which comprises a box body with a back and with side walls extending from said back, an opening having been made on the wall opposite said back. On the inner face of said back a decorative image is reproduced, while a light source turned toward said back extends internally along a frame delimiting said opening, said side walls having reflective surfaces.

The illumination device according to the invention, which may be used for both embedded ceiling or wall and ceiling-fitted installation, and also for fitting with equivalent modules, has the advantage of permitting the illumination of a room by creating the illusion that the light comes from a natural light source, the illusion being accentuated by the sense of depth which the presence of the reflective side walls gives to the background image.

Brief Description of the Drawings

The invention will now be illustrated in greater detail with the following description of one of its embodiments, given as a non-limiting example with reference to the attached drawings in which:

- Figure 1 is a schematic section view of an illumination device according to the invention in the embedded version;

- Figure 2 is a schematic section view of an illumination device according to the invention in the

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ceiling-fitted version;

- Figure 3 is a perspective view of the ceiling installation of the illumination device according to the invention;

5 - Figure 4 is a perspective view of the wall installation of a plurality of illumination devices according to the invention.

Detailed Description of the Invention

With reference to figures 1 and 2, a box-like body 10 of the illumination device according to the invention is indicated with 1. The body 1 is composed of a back wall 2, side walls 3 extending from the sides of the back wall 2 and from a front wall 4 extending from the side walls 3, opposite from the back wall 2. In the present embodiment 15 of the invention, the front wall 4 is formed by a perimetric frame 4a projecting inside the side walls 3 delimiting an opening 4b.

Inside the body 1, along the frame 4a, a tubular, fluorescent light source 5 is arranged, providing a 20 substantially uniform irradiation along the perimetric extension of the frame 4a. This last has a raised edge 4c to hide the light source 5 from outside view. On the inner face of the walls of back 2 a decorative image 6 is reproduced, for example of naturalistic type such as the 25 image of a clear sky, a mountainous or marine landscape, or in any case images characterised by their intrinsic luminosity or ability to suggest the sensation of natural light. The internal faces of the side walls 3 are made of reflective material in order to exalt the depth of the 30 transmitted image. The image may be printed on a flexible panel, for example a plastic or paper film, and applied directly to the back wall 2, or it may be reproduced on a

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rigid panel, to be fastened to the back wall at a certain distance, also to allow the interposition of the power supply means 7 which are otherwise placed outside of the back 2.

5 The above-described illuminating device may be equipped with means which permit the embedded connection in a ceiling or wall or ceiling-fitting. These means, being of known type, are not illustrated in detail. The illumination device according to the invention may be used
10 on its own or in combination with other equivalent devices to form illuminating surfaces with natural backgrounds as illustrated in figure 3. In particular, embodiments may also be foreseen in which each illumination device according to the invention constitutes a module of a
15 complex composition, in which the background image present in each device is only a fraction of a larger image which forms and is visible only after all illumination devices have been installed, by appropriately combining them with respect to each other. One example of complex image
20 composition by way of the illumination devices according to the invention is illustrated in figure 4.

It shall be clear from the above that, even if the primary object of the present invention is to provide an illumination device which gives the sensation of natural
25 luminosity through the association with naturalistic images, the same device may also be associated with any other type of decorative image, comprising advertising messages, as long as it is equipped with its own intrinsic luminosity. In fact, the sense of depth conferred to the
30 image, due to the structure of the illumination device according to the invention, permits the use of the device in applications where traditional light panels are not

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recommended.